



Supplemental Report 1

The original report has been revised/corrected.



CALSCIENCE

WORK ORDER NUMBER: 14-03-0729

The difference is service



AIR | SOIL | WATER | MARINE CHEMISTRY

Analytical Report For

Client: Hargis + Associates, Inc.

Client Project Name: ECP 32 & IS 1132.41F

Attention: Brian Waggle
1640 S. Stapley Drive, Suite 209
Mesa, AZ 85204-6666

Approved for release on 04/02/2014 by:
Kristin Beckley
Project Manager

ResultLink ▶

Email your PM ▶



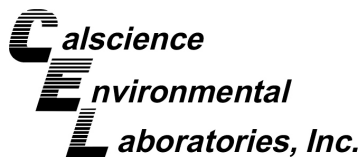
Calscience Environmental Laboratories, Inc. (Calscience) certifies that the test results provided in this report meet all NELAC requirements for parameters for which accreditation is required or available. Any exceptions to NELAC requirements are noted in the case narrative. The original report of subcontracted analyses, if any, is attached to this report. The results in this report are limited to the sample(s) tested and any reproduction thereof must be made in its entirety. The client or recipient of this report is specifically prohibited from making material changes to said report and, to the extent that such changes are made, Calscience is not responsible, legally or otherwise. The client or recipient agrees to indemnify Calscience for any defense to any litigation which may arise.



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Work Order Number: 14-03-0729

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Work Order Narrative

Work Order: 14-03-0729

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Condition Upon Receipt:

Samples were received under Chain of Custody (COC) on 03/11/14. They were assigned to Work Order 14-03-0729.

Unless otherwise noted on the Sample Receiving forms all samples were received in good condition and within the recommended EPA temperature criteria for the methods noted on the COC. The COC and Sample Receiving Documents are integral elements of the analytical report and are presented at the back of the report.

Holding Times:

All samples were analyzed within prescribed holding times (HT) and/or in accordance with the CalScience Sample Acceptance Policy unless otherwise noted in the analytical report and/or comprehensive case narrative, if required.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

Quality Control:

All quality control parameters (QC) were within established control limits except where noted in the QC summary forms or described further within this report.

Additional Comments:

Air - Sorbent-extracted air methods (EPA TO-4A, EPA TO-10, EPA TO-13A, EPA TO-17): Analytical results are converted from mass/sample basis to mass/volume basis using client-supplied air volumes.

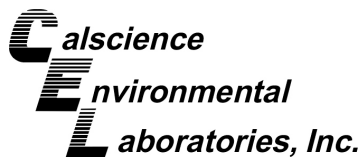
New York NELAP air certification does not certify for all reported methods and analytes, reference the accredited items here: http://www.calscience.com/PDF/New_York.pdf

Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are always reported on a wet weight basis.

Subcontractor Information:

Unless otherwise noted below (or on the subcontract form), no samples were subcontracted.





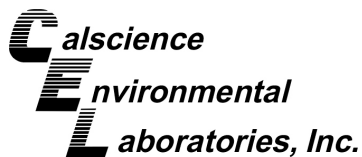
Sample Summary

Client:	Hargis + Associates, Inc.	Work Order:	14-03-0729
	1640 S. Stapley Drive, Suite 209	Project Name:	ECP 32 & IS 1132.41F
	Mesa, AZ 85204-6666	PO Number:	
		Date/Time Received:	03/11/14 10:30
		Number of Containers:	3

Attn: Brian Waggle

Sample Identification	Lab Number	Collection Date and Time	Number of Containers	Matrix
32-F-268	14-03-0729-1	03/07/14 10:26	1	Air
32-F-268 DUP	14-03-0729-2	03/07/14 10:26	1	Air
32-F-268 OA	14-03-0729-3	03/07/14 10:29	1	Air


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Analytical Report

Hargis + Associates, Inc.
1640 S. Stapley Drive, Suite 209
Mesa, AZ 85204-6666

Date Received: 03/11/14
Work Order: 14-03-0729
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: ECP 32 & IS 1132.41F

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Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
32-F-268	14-03-0729-1-A	03/07/14 10:26	Air	GC/MS YY	N/A	03/14/14 21:13	140314L04

Comment(s): - Licensure by Arizona Dept. of Health Services under Environmental Laboratory Certificate AZ0781.

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	2.3	0.670	
Trichloroethene	ND	1.8	0.670	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	100	68-134	
1,2-Dichloroethane-d4	102	67-133	
Toluene-d8	98	70-130	

32-F-268 DUP	14-03-0729-2-A	03/07/14 10:26	Air	GC/MS YY	N/A	03/14/14 22:12	140314L04
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Comment(s): - Licensure by Arizona Dept. of Health Services under Environmental Laboratory Certificate AZ0781.

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	2.3	0.670	
Trichloroethene	ND	1.8	0.670	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	103	67-133	
Toluene-d8	99	70-130	

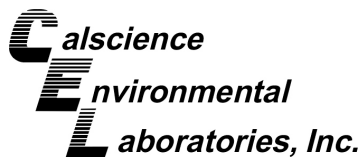
32-F-268 OA	14-03-0729-3-A	03/07/14 10:29	Air	GC/MS YY	N/A	03/14/14 23:12	140314L04
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Comment(s): - Licensure by Arizona Dept. of Health Services under Environmental Laboratory Certificate AZ0781.

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	2.3	0.670	
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1,4-Bromofluorobenzene	98	68-134	
1,2-Dichloroethane-d4	103	67-133	
Toluene-d8	98	70-130	

RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Analytical Report

Hargis + Associates, Inc.
1640 S. Stapley Drive, Suite 209
Mesa, AZ 85204-6666

Date Received: 03/11/14
Work Order: 14-03-0729
Preparation: N/A
Method: EPA TO-15
Units: ug/m3

Project: ECP 32 & IS 1132.41F

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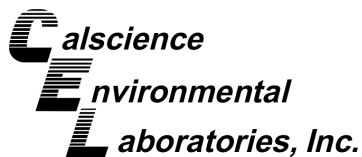
Client Sample Number	Lab Sample Number	Date/Time Collected	Matrix	Instrument	Date Prepared	Date/Time Analyzed	QC Batch ID
Method Blank	099-15-948-16	N/A	Air	GC/MS YY	N/A	03/14/14 16:09	140314L04

Parameter	Result	RL	DF	Qualifiers
Tetrachloroethene	ND	2.3	0.670	
Trichloroethene	ND	1.8	0.670	

Surrogate	Rec. (%)	Control Limits	Qualifiers
1,4-Bromofluorobenzene	99	68-134	
1,2-Dichloroethane-d4	103	67-133	
Toluene-d8	100	70-130	

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RL: Reporting Limit. DF: Dilution Factor. MDL: Method Detection Limit.



Quality Control - LCS/LCSD

Hargis + Associates, Inc.
1640 S. Stapley Drive, Suite 209
Mesa, AZ 85204-6666

Date Received: 03/11/14
Work Order: 14-03-0729
Preparation: N/A
Method: EPA TO-15

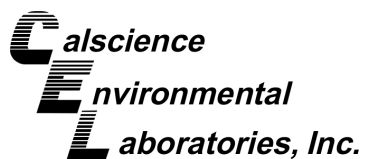
Project: ECP 32 & IS 1132.41F

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Quality Control Sample ID	Type	Matrix	Instrument	Date Prepared	Date Analyzed	LCS/LCSD Batch Number			
099-15-948-16	LCS	Air	GC/MS YY	N/A	03/14/14 12:54	140314L04			
099-15-948-16	LCSD	Air	GC/MS YY	N/A	03/14/14 13:44	140314L04			
<u>Parameter</u>	<u>Spike Added</u>	<u>LCS Conc.</u>	<u>LCS %Rec.</u>	<u>LCSD Conc.</u>	<u>LCSD %Rec.</u>	<u>%Rec. CL</u>	<u>RPD</u>	<u>RPD CL</u>	<u>Qualifiers</u>
Tetrachloroethene	169.6	168.8	100	172.6	102	70-130	2	0-30	
Trichloroethene	134.3	139.5	104	142.4	106	70-130	2	0-30	

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RPD: Relative Percent Difference. CL: Control Limits



Summa Canister Vacuum Summary

Work Order: 14-03-0729

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Sample Name	Vacuum Out	Vacuum In	Equipment	Description
32-F-268	-29.70 in Hg	-7.00 in Hg	D485	Summa Canister 6L
32-F-268 DUP	-29.70 in Hg	-3.00 in Hg	D842	Summa Canister 6L
32-F-268 OA	-29.70 in Hg	-5.00 in Hg	D597	Summa Canister 6L


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Glossary of Terms and Qualifiers

Work Order: 14-03-0729

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<u>Qualifiers</u>	<u>Definition</u>
*	See applicable analysis comment.
<	Less than the indicated value.
>	Greater than the indicated value.
1	Surrogate compound recovery was out of control due to a required sample dilution. Therefore, the sample data was reported without further clarification.
2	Surrogate compound recovery was out of control due to matrix interference. The associated method blank surrogate spike compound was in control and, therefore, the sample data was reported without further clarification.
3	Recovery of the Matrix Spike (MS) or Matrix Spike Duplicate (MSD) compound was out of control due to suspected matrix interference. The associated LCS recovery was in control.
4	The MS/MSD RPD was out of control due to suspected matrix interference.
5	The PDS/PDSD or PES/PESD associated with this batch of samples was out of control due to suspected matrix interference.
6	Surrogate recovery below the acceptance limit.
7	Surrogate recovery above the acceptance limit.
B	Analyte was present in the associated method blank.
BU	Sample analyzed after holding time expired.
BV	Sample received after holding time expired.
E	Concentration exceeds the calibration range.
ET	Sample was extracted past end of recommended max. holding time.
HD	The chromatographic pattern was inconsistent with the profile of the reference fuel standard.
HDH	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but heavier hydrocarbons were also present (or detected).
HDL	The sample chromatographic pattern for TPH matches the chromatographic pattern of the specified standard but lighter hydrocarbons were also present (or detected).
J	Analyte was detected at a concentration below the reporting limit and above the laboratory method detection limit. Reported value is estimated.
JA	Analyte positively identified but quantitation is an estimate.
ME	LCS Recovery Percentage is within Marginal Exceedance (ME) Control Limit range (+/- 4 SD from the mean).
ND	Parameter not detected at the indicated reporting limit.
Q	Spike recovery and RPD control limits do not apply resulting from the parameter concentration in the sample exceeding the spike concentration by a factor of four or greater.
SG	The sample extract was subjected to Silica Gel treatment prior to analysis.
X	% Recovery and/or RPD out-of-range.
Z	Analyte presence was not confirmed by second column or GC/MS analysis.
	Solid - Unless otherwise indicated, solid sample data is reported on a wet weight basis, not corrected for % moisture. All QC results are reported on a wet weight basis.

Any parameter identified in 40CFR Part 136.3 Table II that is designated as "analyze immediately" with a holding time of ≤ 15 minutes (40CFR-136.3 Table II, footnote 4), is considered a "field" test and the reported results will be qualified as being received outside of the stated holding time unless received at the laboratory within 15 minutes of the collection time.

A calculated total result (Example: Total Pesticides) is the summation of each component concentration and/or, if "J" flags are reported, estimated concentration. Component concentrations showing not detected (ND) are summed into the calculated total result as zero concentrations.



WO.# / LAB USE ONLY:

14-03-0729

AIR CHAIN OF CUSTODY RECORD

3/7/2014

DATE:

10

PAGE:

[illegible]

From: (480) 345-0888
Mesa Branch
Hargis & Associates, Inc.
1640 S. Stapley Dr., Suite 209

Origin ID: HAEA



J141014020703uv

Mesa, AZ 85204

SHIP TO: (714) 895-5494

BILL SENDER

Sample Control
Cal Science
1770 Lincoln Way

GARDEN GROVE, CA 92841

Ship Date: 07MAR14
ActWgt: 32.0 LB
CAD: 8669850/NET3490

Delivery Address Bar Code



0729

Ref # Summas (11332&&33.41 VI)
Invoice #
PO #
Dept #

TUE - 11 MAR AA

** 2DAY **

TRK# 7981 4965 4785

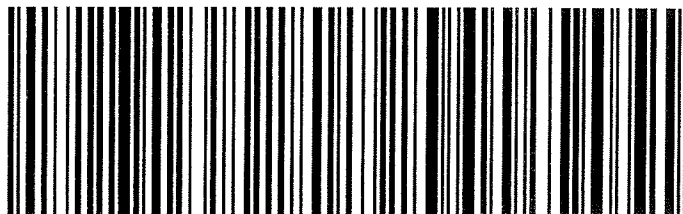
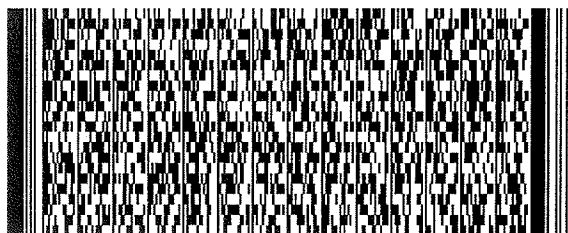
0201

VZ APVA

92841

CA-US

SNA



522G1/CC4F/F220

After printing this label:

1. Use the 'Print' button on this page to print your label to your laser or inkjet printer.
2. Fold the printed page along the horizontal line.
3. Place label in shipping pouch and affix it to your shipment so that the barcode portion of the label can be read and scanned.

Warning: Use only the printed original label for shipping. Using a photocopy of this label for shipping purposes is fraudulent and could result in additional billing charges, along with the cancellation of your FedEx account number.

Use of this system constitutes your agreement to the service conditions in the current FedEx Service Guide, available on fedex.com. FedEx will not be responsible for any claim in excess of \$100 per package, whether the result of loss, damage, delay, non-delivery, misdelivery, or misinformation, unless you declare a higher value, pay an additional charge, document your actual loss and file a timely claim. Limitations found in the current FedEx Service Guide apply. Your right to recover from FedEx for any loss, including intrinsic value of the package, loss of sales, income interest, profit, attorney's fees, costs, and other forms of damage whether direct, incidental, consequential, or special is limited to the greater of \$100 or the authorized declared value. Recovery cannot exceed actual documented loss. Maximum for items of extraordinary value is \$1,000, e.g. jewelry, precious metals, negotiable instruments and other items listed in our Service Guide. Written claims must be filed within strict time limits, see current FedEx Service Guide.

WORK ORDER #: 14-03-0729

SAMPLE RECEIPT FORM

 Box 1 of 1

 CLIENT: Hargis & Associates

 DATE: 03/11/14
TEMPERATURE: Thermometer ID: SC1 (Criteria: 0.0 °C – 6.0 °C, not frozen except sediment/tissue)

 Temperature _____ °C - 0.3 °C (CF) = _____ °C ☐ Blank ☐ Sample

☐ Sample(s) outside temperature criteria (PM/APM contacted by: _____).

☐ Sample(s) outside temperature criteria but received on ice/chilled on same day of sampling.

☐ Received at ambient temperature, placed on ice for transport by Courier.

 Ambient Temperature: ☒ Air ☐ Filter

 Checked by: 826
CUSTODY SEALS INTACT:
☐ Box ☐ _____ ☐ No (Not Intact) ☒ Not Present ☐ N/A

 Checked by: 826
☐ Sample ☐ _____ ☐ No (Not Intact) ☒ Not Present

 Checked by: 300
SAMPLE CONDITION:

	Yes	No	N/A
Chain-Of-Custody (COC) document(s) received with samples.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
COC document(s) received complete.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

☐ Collection date/time, matrix, and/or # of containers logged in based on sample labels.

☐ No analysis requested. ☐ Not relinquished. ☐ No date/time relinquished.

Sampler's name indicated on COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--------------------------------------	-------------------------------------	--------------------------	--------------------------

Sample container label(s) consistent with COC.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Sample container(s) intact and good condition.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Proper containers and sufficient volume for analyses requested.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
---	-------------------------------------	--------------------------	--------------------------

Analyses received within holding time.....	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
--	-------------------------------------	--------------------------	--------------------------

Aqueous samples received within 15-minute holding time

☐ pH ☐ Residual Chlorine ☐ Dissolved Sulfides ☐ Dissolved Oxygen..... ☐ ☐ ☒

Proper preservation noted on COC or sample container.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

☐ Unpreserved vials received for Volatiles analysis

Volatile analysis container(s) free of headspace.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
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Tedlar bag(s) free of condensation.....	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
---	--------------------------	--------------------------	-------------------------------------

CONTAINER TYPE:
Solid: ☐ 4ozCGJ ☐ 8ozCGJ ☐ 16ozCGJ ☐ Sleeve (____) ☐ EnCores® ☐ TerraCores® ☐ _____

Aqueous: ☐ VOA ☐ VOA_h ☐ VOA_{na2} ☐ 125AGB ☐ 125AGB_h ☐ 125AGB_p ☐ 1AGB ☐ 1AGB_{na2} ☐ 1AGB_s
☐ 500AGB ☐ 500AGJ ☐ 500AGJ_s ☐ 250AGB ☐ 250CGB ☐ 250CGB_s ☐ 1PB ☐ 1PB_{na} ☐ 500PB

☐ 250PB ☐ 250PB_n ☐ 125PB ☐ 125PB_{znna} ☐ 100PJ ☐ 100PJ_{na2} ☐ _____ ☐ _____ ☐ _____

Air: ☐ Tedlar® ☒ Canister **Other:** ☐ _____ **Trip Blank Lot#:** _____ **Labeled/Checked by:** 300
Container: C: Clear A: Amber P: Plastic G: Glass J: Jar B: Bottle Z: Ziploc/Resealable Bag E: Envelope **Reviewed by:** 826
Preservative: h: HCL n: HNO₃ na₂: Na₂S₂O₃ na: NaOH p: H₃PO₄ s: H₂SO₄ u: Ultra-pure znna: ZnAc₂+NaOH f: Filtered **Scanned by:** 300